Version with Markings to Show Changes Made – S/N 09/737,658

IN THE SPECIFICATION

Please replace the paragraph beginning at page 10, line 9 with the following:

As shown in Fig. 7C, the sealing resin 6 is supplied to a central section of the mounting area on the substrate 1. For this purpose, the present invention employs a one-point coating by a known dispenser. The sealing resin 6 is an epoxy-based instantaneous thermosetting resin of which a ratio of contraction is larger than a ratio of thermal expansion of cured [the] sealing resin. The sealing resin 6 is completely set or hardened in about 30 seconds at 200 °C. The sealing resin 6 is supplied on the substrate 1 by the one-point coating. The supplied resin 6 is in a contour of [about a] an approximately [semispherical] hemispherical shape by surface tension of the resin 6.

Please replace the paragraph beginning at page 11, line 23 with the following:

In the embodiments of Figs. 4 and 5, on an inner [edges] edge of the solder resist 2 disposed in a peripheral section of the substrate 1, the mounting pad 3 is formed in parallel with each associated one of the inner edges respectively in four directions. In the embodiment of Fig.4, on an inner side of each section of the mounting pad 3, a solder resist 2 is formed in parallel therewith. In the embodiment shown in Fig. 5, on the inner side of each section of the mounting pad 3, a solder resist 2 is formed in a trapezoidal contour. In [the] a trapezoid 8, an upper edge 9 on the side of a central section of the substrate 1 is shorter than a lower edge 10 on the side of the pad 3 and the upper and lower edges 9, 10 are parallel to the pad 3.

Please replace the paragraph beginning at page 12, line 4 with the following:

According to the embodiment of Fig. 6, two mounting pads 2 are disposed on the substrate 1 to oppose each other. On an inner side of each pad 2, a trapezoidal solder resist 2 is fabricated. In the contour of the resist 2, a lower edge 10 on the side of the pad 3 is longer than an upper edge 9 on the side of a central section of the substrate 1, and the upper and lower edges 9, 10 are parallel to the pad 3. Moreover, on an inner side of the remaining edges which oppose each other, a triangular solder resist [2] 11 is arranged. The triangle 11 includes a bottom edge 12 on a peripheral side of the substrate 1 and a vertex 13 opposing the bottom edge 12 on a central section of the substrate 1.

IN THE CLAIMS

1. (Amended) A semiconductor mounting device [characterized in that;] comprising:

[having a plural] a plurality of solder [resist] resists positioned on a substrate between a pair of mounting pad [line] lines, at least a pair of said plurality of solder resists being set up nearly parallel to [said] each mounting pad [each other] line;

[said] each solder resist [constructing] extending toward [up to a corner portion] end portions of said mounting pad lines so as to spread a sealing resin [uniformity] uniformly toward corners defined by said mounting pad line end portions when said semiconductor device is set on said mounting pad lines.

2. (Amended) A semiconductor mounting device [characterized in that;] comprising:

[having a plural] a plurality of solder [resist] resists positioned on a substrate between a pair of mounting pad [line] lines, at least a pair of said plurality of solder resists being set up nearly parallel to [said] each mounting pad line [each other]; and

a plurality of channels each defined between adjacent solder resists;

said [solder resist divided and constructed up to a corner portion of said mounting pad lines so as to] channels serving to feed a sealing resin [spreading uniformity] when said semiconductor device is set on said mounting pad lines uniformly toward corners defined by said mounting pad line end portions.

Cancel claim 3 without prejudice.

4. A semiconductor mounting device [characterized in that;] comprising:

[having a plural] a plurality of solder [resist] resists positioned on a substrate between two pairs of mounting pad [line] lines, a solder resist set up nearly parallel to [said] each mounting pad lines [each other];

a plurality of channels each defined between adjacent solder resists, said channels positioned diagonally with respect to the mounting pad lines;

said [solder resist divided diagonal direction formed by said two pairs of mounting pad line up to a corner position of said mounting pad line so as to] channels serving to feed a sealing resin [spreading uniformity] when said semiconductor device is set on said mounting pad lines uniformly toward corners defined by said mounting pad line end portions.

5. A semiconductor device mounting method in which on a substrate on which a mounting pad including a mounting section is formed, sealing resin is supplied by one-

point coating onto a central position of the mounting section, a semiconductor device including a plurality of projected electrodes is placed on the substrate, and the resin is heated under a predetermined pressure to thereby mount the semiconductor device onto the substrate, comprising the steps of:

arranging in the mounting section a plurality of solder resist zones to orient a flow of the sealing resin in a predetermined direction, the zones projecting upward;

mounting the semiconductor device on the mounting section and supplying thereby the sealing resin in a circumferential area of the semiconductor device mounted on the substrate; and

forming with the sealing resin a filet in the circumferential area, the filet being uniform in quantity of resin.

6. (Amended) The semiconductor mounting method in accordance with claim 5, wherein the solder resist zones [has] have a thickness ranging from 10 μm to 30 μm.

7. The semiconductor device mounting method in accordance with claim 5, wherein the sealing resin is an epoxy-based instantaneous thermosetting resin having a contraction ration and an expansion ratio of cured resin, the contraction ratio larger than the expansion ratio.

8. (Amended) The semiconductor device mounting method in accordance with claim 5, wherein the solder resist zones [has] have a thickness ranging from 10 μm to 30 μm and the sealing resin is an epoxy-based instantaneous thermosetting resin having a contraction ration and an expansion ratio of cured resin, the contraction ratio larger than the expansion ratio.

9. (Amended) A semiconductor device mounting method in which on a substrate on which a mounting pad including a mounting section is formed interior to the mounting pad, sealing resin is supplied by one-point coating onto a central position of the mounting section, a semiconductor device including a plurality of projected electrodes is placed on the substrate, and the resin is heated under a predetermined pressure to thereby mount the semiconductor device onto the substrate, comprising the steps of:

arranging in the mounting section a plurality of solder resist zones to orient a flow of the sealing resin in a predetermined direction, the zones projecting upward;

mounting the semiconductor device on the mounting section and supplying thereby the sealing resin in a circumferential area of the semiconductor device mounted on the substrate;

forming with the sealing resin a filet in the circumferential area, the filet being uniform in quantity of resin; [and

[further comprising the step of arranging, on an inner side of the mounting pad on the substrate,] wherein the solder resist zones each [of which] has a rectangular contour, and

[the solder resist zones being respectively] are each parallel to [edges] an edge of the semiconductor device mounted on the substrate.

10. (Amended) The semiconductor device mounting method in accordance with claim 9, wherein the solder resist zones [has] have a thickness ranging from 10 μm to 30 μm.

11. The semiconductor device mounting method in accordance with claim 9, wherein the sealing resin is a epoxy-based instantaneous thermosetting resin having a contraction ratio and an expansion ratio of cured resin, the contraction ratio larger than the expansion ratio.

12. (Amended) The semiconductor device mounting method in accordance with claim 9, wherein the solder resist zones [has] have a thickness ranging from 10 μm to 30 μm and the sealing resin is a epoxy-based instantaneous thermosetting resin having a contraction ratio and an expansion ratio of cured resin, the contraction ratio larger than the expansion ratio.

13. (Amended) A semiconductor device mounting method in which on a substrate on which a mounting pad including a mounting section is formed interior to the mounting pad, sealing resin is supplied by one-point coating onto a central position of the mounting section, a semiconductor device including a plurality of projected electrodes is placed on the substrate, and the resin is heated under a predetermined pressure to thereby mount the semiconductor device onto the substrate, comprising the steps of:

arranging in the mounting section a plurality of solder resist zones to orient a flow of the sealing resin in a predetermined direction, the zones projecting upward;

mounting the semiconductor device on the mounting section and supplying thereby the sealing resin in a circumferential area of the semiconductor device mounted on the substrate;

forming with the sealing resin a filet in the circumferential area, the filet being uniform in quantity of resin; [and

further comprising the step of arranging, on an inner side of the mounting pad on the substrate,] wherein the solder resist zones each [of which] has a trapezoidal contour,

the trapezoidal contour including a lower edge on an outer side of the mounting section and an upper edge on a central side of the mounting section, the upper edge being longer than the lower edge,

the upper and lower edges being parallel to an associated [one of edges] edge of the semiconductor device mounted on the substrate.

14. (Amended) The semiconductor device mounting method in accordance with claim 13, wherein the solder resist zones [has] have a thickness ranging from 10 μm to 30 μm.

15. The semiconductor device mounting method in accordance with claim 13, wherein the sealing resin is an epoxy-based instantaneous thermosetting resin having a contraction ratio and an expansion ratio of cured resin, the contraction ratio larger than the expansion ratio.

16. (Amended) The semiconductor device mounting method in accordance with claim 13, wherein the solder resist zones [has] have a thickness ranging from 10 μm to 30 μm and the sealing resin is an epoxy-based instantaneous thermosetting resin having a contraction ratio and an expansion ratio of cured resin, the contraction ratio larger than the expansion ratio.

17. (Amended) A semiconductor device mounting method in which on a substrate on which a mounting pad including a mounting section is formed interior to the mounting pad, sealed resin is supplied by one-point coating onto a central position of the

mounting section, a semiconductor device including a plurality of projected electrodes is placed on the substrate, and the resin is heated under a predetermined pressure to thereby mount the semiconductor device onto the substrate, comprising the steps of:

arranging in the mounting section a plurality of solder resist zones to orient a flow of the sealing resin in a predetermined direction, the zones projecting upward;

mounting the semiconductor device on the mounting section and supplying thereby the sealing resin in a circumferential area of the semiconductor device mounted on the substrate;

forming with the sealing resin a filet in the circumferential area, the filet being uniform in quantity of resin; [and

further comprising the step of arranging, on an inner side of the mounting pad on the substrate,] wherein two opposing solder resist zones each [of which] has a trapezoidal contour, [the zones opposing each other,]

[the] each trapezoidal contour including a lower edge on an outer side of the mounting section and an upper edge on a central side of the mounting section, the lower edge being longer than the upper edge,

the upper and lower edges being parallel to a [longer] major edge of [the] a rectangular contour of the semiconductor device mounted on the substrate,

[the method further comprising the step of arranging, on an inner side of the mounting pad on the substrate,] and wherein two opposing solder resist zones each [of which] has a triangular contour, [the zones opposing each other,]

[the] each triangular contour including a bottom edge on [a peripheral] an outer side of the mounting section and a vertex opposing the bottom edge on a central side of the mounting section,

the bottom edge being parallel to a [shorter] minor edge of the semiconductor device mounted on the substrate.

18. (Amended) The semiconductor device mounting method in accordance with claim 17, wherein the solder resist zones [has] have a thickness ranging from 10 μm to 30 μm.

19. The semiconductor device mounting method in accordance with claim 17, wherein the sealing resin is a epoxy-based instantaneous thermosetting resin having a contraction ratio and an expansion ratio of cured resin, the contraction ratio larger than the expansion ratio.

20. (Amended) The semiconductor device mounting method in accordance with claim 17, wherein the solder resist zones [has] have a thickness ranging from 10 μm to 30 μm and the sealing resin is a epoxy-based instantaneous thermosetting resin having a contraction ratio and an expansion ratio of cured resin, the contraction ratio larger than the expansion ratio.